

1. Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A decentralized power generation system, said system comprising:

a plurality of decentralized power generating units;

a plurality of DC/DC converters none of which are configured to buffer energy, wherein each of said DC/DC converters is connected to another a respective one of said power generating units and, when a voltage supplied from a respective power generating units meets or exceeds a threshold voltage, the associated DC/DC converter is configured to convert a current provided by said power generating units;

a DC bus to which each of said DC/DC converters is coupled for feeding a respectively converted current into said DC bus; and

at least one power receiving component connected to said DC bus for retrieving current from said DC bus, wherein the power receiving component is physically separated from said DC/DC converters.

2. (Previously Presented) A decentralized power generation system according to claim 1, wherein each of said DC/DC converters is adapted to operate autonomously and to ensure a predetermined voltage on said DC bus.

3. (Previously Presented) A decentralized power generation system according to claim 1, wherein each of said decentralized power generating units is mechanically coupled to a respective DC/DC converter.

4. (Previously Presented) A decentralized power generation system according to claim 1, wherein said power receiving component is adapted to survey a voltage on said DC bus and to reduce the power retrieved from said DC bus when the voltage on said DC bus is detected to be decreasing.

5. (Previously Presented) A decentralized power generation system according to claim 1, further comprising at least one control line connecting each of said DC/DC converters to said at least one power receiving component, which at least one control line is arranged for switching on and off said DC/DC converters.

6. (Previously Presented) A decentralized power generation system according to claim 5, further comprising at least one plug connection for electrically connecting a respective DC/DC converter in common to said DC bus and, via said control line, to said at least one power receiving component.

7. (Previously Presented) A decentralized power generation system according to claim 6, wherein said at least one plug connection is adapted to electrically connect a respective DC/DC converter to said DC bus before connecting said DC/DC converter via said control line to said at least one power receiving component and to interrupt the connection between said DC/DC converter via said control line to said at least one power receiving component before disconnecting said DC/DC converter from said DC bus.

8. (Previously Presented) A decentralized power generation system according to claim 1, wherein said power receiving component is an inverter arranged to convert a direct current retrieved from said DC bus into an alternating current and to feed said alternating current into an alternating current power supply system.

9. (Previously Presented) A decentralized power generation system according to claim 1,

wherein each of said power generating units comprises at least one photovoltaic module.

10. (Currently Amended) A method of operating a decentralized power generation system, wherein the system comprises a plurality of decentralized power generating units, a plurality of DC/DC converters, none of which are configured to buffer energy, a DC bus and at least one power receiving component, which is physically separated from said DC/DC converters, said method comprising:

generating a current by means of said plurality of power generating units;
when a voltage supplied from a respective power generating units meets or exceeds a threshold voltage, converting the current provided by each of said power generating units by means of a respective DC/DC converter;
feeding said converted currents into said DC bus; and
providing current from said DC bus to said at least one power receiving component.

11. (Currently Amended) A decentralized power generation system, comprising:
a plurality of decentralized power generating units;
a plurality of DC/DC converters, none of which are configured to buffer energy, wherein each of the DC/DC converters is connected to a respective another one of the power generating units and, when a voltage supplied from a respective power generating units meets or exceeds a threshold voltage, the associated DC/DC converter is configured to convert a current provided by the power generating units;
a DC bus to which each of the DC/DC converters is coupled for feeding a respectively converted current into the DC bus; and
at least one power receiving component connected to the DC bus for retrieving current from the DC bus, wherein a respective predetermined output voltage is set for each of the DC-DC converters, and the current provided by each of the DC-DC converters is prevented from exceeding a respective predetermined maximum value.

12. (Previously Presented) A decentralized power generation system as claimed in claim 11, wherein none of the DC-DC converters includes an electrolyte capacitor.
13. (Previously Presented) A decentralized power generation system according to claim 11, wherein each of the decentralized power generating units is mechanically coupled to a respective DC/DC converter.
14. (Previously Presented) A decentralized power generation system as claimed in claim 11, wherein the power receiving component is adapted to survey a voltage on the DC bus and to reduce the power retrieved from the DC bus when the voltage on the DC bus is detected to be decreasing.
15. (Previously Presented) A decentralized power generation system as claimed in claim 11, further comprising at least one control line connecting each of the DC/DC converters to the at least one power receiving component, which at least one control line is arranged for switching on and off the DC/DC converters.
16. (Previously Presented) A decentralized power generation system as claimed in claim 15, further comprising at least one plug connection for electrically connecting a respective DC/DC converter in common to the DC bus and, via the control line, to the at least one power receiving component.
17. (Previously Presented) A decentralized power generation system as claimed in claim 16, wherein the at least one plug connection is adapted to electrically connect a respective DC/DC converter to the DC bus before connecting the DC/DC converter via the control line to the at least one power receiving component and to interrupt the connection between the DC/DC converter via the control line to the at least one power receiving component before disconnecting the DC/DC converter from the DC bus.

18. (Previously Presented) A decentralized power generation system as claimed in claim 11, wherein the power receiving component is an inverter arranged to convert a direct current retrieved from the DC bus into an alternating current and to feed the alternating current into an alternating current power supply system.

19. (Previously Presented) A decentralized power generation system as claimed in claim 11, wherein each of the power generating units comprises at least one photovoltaic module.